

# Louisiana Environmental Protection and Sustainability Pathway: Labor Market Review

June 2020

## Data Overview

Data for the labor market analysis was obtained by SREB from the Louisiana Workforce Commission and from Jobs EQ, a service that provides analysis of labor market conditions. Both sources used data collected from the US Bureau of Labor Statistics tailored to the State of Louisiana. This data is presented for each occupation defined by the Standard Occupational Classification system used by US federal government agencies to classify occupations. SREB narrowed this down to occupations identified as connected to the Environmental Protection and Sustainability pathway. This full list is available under the “List of Occupations” tab in the spreadsheet.

Jobs EQ provided statewide data on employment figures from the most recent quarter, as well as a seven-year employment projection based on these numbers. Combined, these numbers give an idea of the current and future demand for each occupation. Additionally, Jobs EQ provided a breakdown of the typical education of workers in each occupation to present a picture of the level of education needed to obtain a job in each category.

Figure 1: Map of Louisiana’s Regional Labor Market Areas. Source: [Louisiana Workforce Development Website](#).



The LWC provided statewide wage data as well as data for each of the eight Local Workforce Development Area regions as defined by the state Department of Labor, as shown in Figure 1. The wage data presented include the average annual wage for each occupation, the average annual wage for the lowest-paid 10 percent of workers in each occupation, and the average annual wage for the highest-paid 10 percent of workers in each occupation. This provides a clear picture of what the average worker earns, as well as what a new graduate could expect to earn and what an experience worker could expect to earn.

While Jobs EQ provided the most up-to-date data for each occupation, this data was only available for the state. Regional employment data was obtained from the LWC, which provided a dataset for each of the eight regions. These datasets included ten-year employment projections for 2016-2026 to show the expected growth of each field, as well as the total annual job openings to demonstrate actual employment demand. 2016 was the most recent year for which these projections were available. The LWC regional datasets often lacked many of the occupations presented in the statewide table due to either a lack of available jobs in a specific category in a region, or due to a lack of data for an occupation. The LWC data also included a Star Rating for each occupation.

The Star Ratings were developed by the LWC to identify top-demand occupations that have the highest impact on their local economies. This is determined based on a review of long- and short-term annual demand, number of recent job openings, and median wage for each occupation. Occupations with a five-star rating have the highest outlook, while those with a one-star rating have the lowest. These ratings are determined both statewide and by region. For example, while “Foresters” only have a two-star rating statewide, demand might be higher in a region, giving them a higher rating in that region.

## Occupational Outlook

Table 1 provides the top Environmental Protection and Sustainability occupations for the state. These six EPS occupations are designated as five-star jobs by the LWC. Each of these occupations has a promising outlook for expected job growth over the next seven years as well as high average annual wages. The combination of these factors makes these the top jobs available for EPS students.

Table 1: Top EPS Occupations in the State of Louisiana

Occ. Code	Occupational Title	2018 RLMA 1 Annual Average Wage	2018 RLMA 1 Annual Avg. Wage - Lowest 10%	2018 RLMA 1 Annual Avg. Wage - Highest 10%	2019 Q4 Estimated Employment	Total Openings (Due to Growth and Transfers) 2020-2027
19-2031	Chemists	\$77,493	\$41,835	\$121,326	1,075	648
17-2041	Chemical Engineers	\$111,092	\$63,216	\$165,672	2,400	1,400
17-2051	Civil Engineers	\$98,698	\$59,487	\$141,477	3,650	1,904
17-2071	Electrical Engineers	\$94,090	\$57,680	\$135,057	1,229	559
19-2041	Environmental Scientists and Specialists, Including Health	\$68,568	\$36,042	\$117,979	1,017	660
17-2141	Mechanical Engineers	\$101,805	\$51,356	\$158,652	2,095	877

Source: U.S. Bureau of Labor Statistics, Louisiana Workforce Commission and JobsEQ; see Appendix A (Excel).

Table 2 presents the top EPS occupations in each region. The five-star occupations are listed for each region, or in cases where few five-star occupations were listed, the four-star occupations with the highest expected growth and highest average wages. These occupations may not be the same as the top jobs listed statewide due to varying demand across regions.

Table 2: Top EPS Occupations by Region

Occupational Title	Annual Total Openings (Growth and Transfers)	2018 RLMA 1 Annual Average Wage
<b>Region 1</b>		
Electrical Engineers	50	\$98,879
Environmental Scientists & Specialists, Incl. Health	40	\$76,930
Chemical Engineers	50	\$111,092
Mechanical Engineers	70	\$106,840
<b>Region 2</b>		
Civil Engineers	90	\$97,580
Electrical Engineers	50	\$94,116
Environmental Engineers	20	\$110,488
Environmental Scientists & Specialists, Incl. Health	50	\$64,827
Chemical Engineers	100	\$111,092
Mechanical Engineers	50	\$101,630
<b>Region 3</b>		
Civil Engineers	10	\$86,375
Mechanical Engineers	10	\$89,889
Commercial Divers	10	\$50,151
<b>Region 4</b>		
Civil Engineers	30	\$98,747
Chemical Technicians	10	\$48,345
Electrical and Electronics Engineering Technicians	50	\$45,849
<b>Region 5</b>		
Chemical Engineers	40	\$92,035
Chemists	20	\$80,184
Civil Engineers	50	\$95,767
Electrical Engineers	20	\$97,933
Chemical Engineers	40	\$111,092
Mechanical Engineers	20	\$106,103
<b>Region 6</b>		
Civil Engineers	10	\$93,782
Civil Engineering Technicians	10	\$49,752
Electrical and Electronics Engineering Technicians	10	\$61,580
<b>Region 7</b>		
Civil Engineers	20	\$88,868
Electrical and Electronics Engineering Technicians	10	\$55,845
Electrical Engineers	10	\$84,594
Mechanical Engineers	10	\$86,641
<b>Region 8</b>		
Civil Engineers	10	\$133,633
Architectural and Civil Drafters	10	\$47,388

Source: U.S. Bureau of Labor Statistics, Louisiana Workforce Commission and JobsEQ; see Appendix A (Excel).

Table 3 provides the top seven EPS occupations for individuals who have completed high school (and does not hold any other degree). The list below represents:

- four- or five-star occupations,
- a combination of high projected growth and high wages (with a large earning potential), and
- a large portion of workers possessing no more than a high school diploma.

Table 3: Top EPS Available Jobs for High School Graduates (Statewide)

Occupational Code	Occupational Title	2018 RLMA 1 Annual Average Wage	2018 RLMA 1 Annual Avg. Wage - Lowest 10%	2018 RLMA 1 Annual Avg. Wage - Highest 10%	Total Openings (Due to Growth and Transfers) 2020-2027	Percentage of Employees with Only HS Diploma	Percentage of Employees with Some College
17-3031	Surveying and Mapping Technicians	\$44,544	\$26,202	\$67,850	794	37%	34%
51-8013	Power Plant Operators	\$71,385	\$37,424	\$104,120	188	38%	28%
17-3022	Civil Engineering Technicians	\$51,384	\$33,324	\$71,205	456	28%	29%
17-3025	Environmental Engineering Technicians	\$51,745	\$26,198	\$104,224	208	28%	29%
17-3027	Mechanical Engineering Technicians	\$82,347	\$47,627	\$121,132	140	29%	28%
19-4031	Chemical Technicians	\$65,033	\$34,007	\$96,999	1,487	29%	23%
17-3011	Architectural and Civil Drafters	\$56,389	\$34,696	\$84,099	676	15%	28%

Source: U.S. Bureau of Labor Statistics, Louisiana Workforce Commission and JobsEQ; see Appendix A (Excel).

Table 4 provides the top EPS occupations in each region for someone who has completed high school but does not hold any other degree. They represent four- or five-star occupations with a combination of high projected growth and high wages with a large earning potential, with a large portion of workers possessing no more than a high school diploma. These occupations may not be the same as the top jobs listed statewide due to varying demand across regions.

Table 4 Top EPS Jobs Available for High School Graduates by Region

Occupational Title	Annual Total Openings (Growth and Transfers)	2018 RLMA 1 Annual Average Wage	Percentage of Employees with Only HS Diploma	Percentage of Employees with Some College
<b>Region 1</b>				
Power Plant Operators	10	\$80,137	38%	28%
Civil Engineering Technicians	60	\$49,520	28%	29%
Mechanical Engineering Technicians	40	\$84,756	29%	28%
Chemical Technicians	60	\$60,119	29%	23%
Architectural and Civil Drafters	40	\$60,842	15%	28%
<b>Region 2</b>				
Surveying and Mapping Technicians	50	\$50,298	37%	34%
Civil Engineering Technicians	50	\$54,754	28%	29%
Environmental Engineering Technicians	10	\$62,068	28%	29%
Mechanical Engineering Techs.	10	\$93,984	29%	28%
Chemical Technicians	80	\$73,356	29%	23%
<b>Region 3</b>				
Surveying and Mapping Technicians	10	\$43,624	37%	34%
Commercial Divers	10	\$50,151	47%	22%
<b>Region 4</b>				
Surveying and Mapping Technicians	30	\$42,970	37%	34%
Power Plant Operators	10	\$49,735	38%	28%
Chemical Technicians	10	\$48,345	29%	23%
Environmental Science & Protection Techs., Incl. Health	10	\$55,565	18%	18%
<b>Region 5</b>				
Water and Wastewater Treatment Plant & Sys. Operators	20	\$34,393	49%	26%
Civil Engineering Technicians	20	\$45,937	28%	29%
Chemical Technicians	40	\$62,785	29%	23%
<b>Region 6</b>				
Water and Wastewater Treatment Plant and System Operators	20	\$36,397	49%	26%
Civil Engineering Technicians	10	\$49,752	28%	29%
<b>Region 7</b>				
Electrical and Electronics Engineering Technicians	10	\$55,845	15%	28%
Power Plant Operators	10	\$67,497	38%	28%
Civil Engineering Technicians	10	\$56,839	28%	29%
Chemical Technicians	20	\$53,258	29%	23%
Architectural and Civil Drafters	10	\$47,786	15%	28%
<b>Region 8</b>				
Architectural and Civil Drafters	10	\$47,388	15%	28%

Source: U.S. Bureau of Labor Statistics, Louisiana Workforce Commission and JobsEQ; see Appendix A (Excel).